IN THE SPECIFICATION

Please replace the paragraph number 34 on page 25 with the following rewritten paragraph:

Figure 4 is a simplified schematic of a fluid cat cracking process used in conjunction with the feed injection method of the invention. Turning to Figure 4, an FCC unit 100 useful in the practice of the invention is shown as comprising a catalytic cracking reactor unit 112 and a regeneration unit 114. Unit 112 includes a feed riser 116, the interior of which comprises the catalytic cracking reaction zone 118. It also includes a vapor-catalyst disengaging zone 120 and a stripping zone 122 containing a plurality of baffles 124 within, in the form of arrays of metal "sheds" which resemble the pitched roofs of houses. A suitable stripping agent such as steam is introduced into the stripping zone via line 126. The stripped, spent catalyst particles are fed into regenerating unit 114 via transfer line 128. A preheated FCC feed is passed via feed line 130 into a feed injector (not shown) containing a heat exchange means of the invention, which heats at least a portion of the dispersion steam according to any of the embodiments of the invention. Steam, from steam line 132, is fed into the hot oil feed according to any of the embodiments of the invention, to form a two-phase, gas continuous mixture of the steam and hot oil which is passed through an atomizing orifice in the injector and into the base of riser 116 as a flat, fan-shaped spray, at feed injection point 134. The feed injector is not shown in Figure 5 for the sake of simplicity. In a preferred embodiment, a plurality of feed injectors may be circumferentially located around the feed injection area of riser 116. Other geometrical configurations for the plurality of feed injectors may also be used. A preferred feed comprises a mixture of a vacuum gas oil (VGO) and a heavy feed component, such as a resid fraction. The hot feed is contacted with particles of hot, regenerated cracking catalyst in the riser. This vaporizes and catalytically cracks the feed into lighter, lower boiling fractions, including fractions in the gasoline boiling range (typically 38 - 204^{o}C), as well as higher boiling jet fuel, diesel fuel, kerosene and the like. The cracking catalyst is a mixture of silica and alumina containing a zeolite molecular sieve

cracking component, as is known to those skilled in the art. The catalytic cracking reactions start when the feed contacts the hot catalyst in the riser at feed injection point 134 and continue until the product vapors are separated from the spent catalyst in the upper or disengaging section 120 of the cat cracker vessel 112. The cracking reaction deposits strippable hydrocarbonaceous material and non-strippable carbonaceous material known as coke, to produce spent catalyst particles which must be stripped to remove and recover the strippable hydrocarbons and then regenerated by burning off the coke in the regenerator. Vessel 112 contains cyclones (not shown) in the disengaging section 120, which separate both the cracked hydrocarbon product vapors and the stripped hydrocarbons (as vapors) from the spent catalyst particles. The hydrocarbon vapors pass up through the reactor and are withdrawn via line 136. The hydrocarbon vapors are typically fed into a distillation unit (not shown) which condenses the condensable portion of the vapors into liquids and fractionates the liquids into separate product streams. The spent catalyst particles fall down into stripping zone 122 in which they are contacted with a stripping medium, such as steam, which is fed into the stripping zone via line 126 and removes, as vapors, the strippable hydrocarbonaceous material deposited on the catalyst during the cracking reactions. These vapors are withdrawn along with the other product vapors via line 136. The [baffles 122] <u>baffles 124</u> disperse the catalyst particles uniformly across the width of the stripping zone or stripper and minimize internal refluxing or backmixing of catalyst particles in the stripping zone. The spent, stripped catalyst particles are removed from the bottom of the stripping zone via transfer line 128, from which they are passed into fluidized bed 138 in [regenerator 144] <u>regenerator 114</u>. In the fluidized bed they are contacted with air entering the regenerator via line 140 and some pass up into disengaging zone 142 in the regenerator. The air oxidizes or burns off the carbon deposits to regenerate the catalyst particles and in so doing, heats them up to a temperature which preferably doesn't exceed about 760°C and typically ranges from about 650 - 700°C. Regenerator 114 also contains cyclones (not shown) which separate the hot regenerated catalyst particles from the gaseous combustion products which comprise mostly CO, N_2, H_2O and CO_2 and conveys the regenerated catalyst particles back down into fluidized catalyst bed 138,

by means of diplegs (not shown), as is known to those skilled in the art. The fluidized bed 138 is supported on a gas distributor grid, which is briefly illustrated as dashed line 144. The hot, regenerated catalyst particles in the fluidized bed overflow the weir 146 formed by the top of a funnel 148, which is connected at its bottom to the top of a downcomer 150. The bottom of downcomer 150 turns into a regenerated catalyst transfer line 152. The overflowing, regenerated particles flow down through the funnel, downcomer and into the transfer line 152 which passes them back into the riser reaction zone 118, in which they contact the hot feed entering the riser from the feed injector. Flue gas comprising the combustion products referred to above is removed from the top of the regenerator via line 154.